

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/757,856	01/14/2004	Yasuhiko Inagaki	MM4700	7530	
1109 75	590 03/11/2005		EXAMINER		
ANDERSON, KILL & OLICK, P.C. 1251 AVENUE OF THE AMERICAS			IP, SHIK LUEN PAUL		
NEW YORK,, NY 10020-1182			ART UNIT	PAPER NUMBER	
,			2837		
			DATE MAILED: 03/11/2003	DATE MAILED: 03/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

AL

	Application No.	Applicant(s)				
	10/757,856	INAGAKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Paul tp	2837				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period was really reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-16 is/are pending in the application.	4) Claim(s) 1-16 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
· <u> </u>	Claim(s) is/are allowed.					
	Claim(s) 1,5 and 16 is/are rejected.					
· · · · · · · · · · · · · · · · · · ·	<ul> <li>✓ Claim(s) <u>2-4 and 6-15</u> is/are objected to.</li> <li>✓ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
	oloolion roquitoment.					
Application Papers						
· _	9) The specification is objected to by the Examiner.					
	The drawing(s) filed on 14 January 2004 is/are: a)  accepted or b)  objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<u> </u>		(d) as (D)				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
occ the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal Pa	ite atent Application (PTO-152)				
Paper No(s)/Mail Date 1/14/04.	6) Other:					

Application/Control Number: 10/757,856

Art Unit: 2837

#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/14/04 in compliances with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gotou (5,959,418) or Gotou et al (5,982,118).

Gotou and Gotou et al show in figure 1 an external current control signal 34, a control current generation circuit 36 and a plurality of drive current generation circuits (11, 12, 13, 15, 16, 17) as recited in the claim.

5. Claims 5 and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Otani et al (4,977,356).

Otani et al show in figure 1 a control current generation circuit 24, external current control signal (20a-20c, 22a-22c), first drive current control element Q1, second drive current control element Q2, first drive current generation circuit 30, and second drive current generation circuit 32 the same as recited in the claims.

Application/Control Number: 10/757,856

Art Unit: 2837

## Allowable Subject Matter

6. Claims 2-4 and 6-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The references of the record fail to teach or suggest a variable current source that generates and outputs a current corresponding to the external current control signal, and a first current mirror and a second current mirror with the corresponding configurations as recited in the claims.

#### Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Gotou (6,172,474 or 6,570,357 or 6,262,557) disclose motor with electronic distribution configurations that can be read on claims 1, 5, and 16.

The patents to Nishimura (6,320,337), Nishimura et al (6,380,709), Kondoh et al (5,877,602) Nakai (5,793,170), Ishii (4,987,352), Naito (5,331,259), Schlager et al (5,920,166 or 5,661,383), and Carobolante (5,614,797) are current mirror control systems for controlling the current of the motors.

#### Communication Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941. The examiner can normally be reached on Monday to Friday from 6:30 am to 3:00 pm Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on (571)-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/757,856 Page 4

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Ip

Primary Examiner

Art Unit 2837